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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,636	09/18/2003	Nicholas Wynne	7659-D	8971

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EXAMINER

RHEE, JANE J

ART UNIT PAPER NUMBER

1772

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,636

Applicant(s)

WYNNE, NICHOLAS

Examiner

Jane Rhee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Rejections Withdrawn

1. The Double Patenting Rejection of claims 29-39 over US Patent No. 5900299 has been withdrawn due to applicant's terminal disclaimer filed on 8/19/2004.
2. The 35 U.S.C. 102(b) rejection anticipated by Bridges et al. of claims 26,28-30,32,34,36,38 has been withdrawn due to applicant's amendment in response 9/20/2004.
3. The 35 U.S.C. 103(a) rejection over Bridges et al. in view of De Vos et al. of claims 27,33,37 has been withdrawn due to applicant's amendment in response 9/20/2004.
4. The 35 U.S.C. 103(a) rejection over Bridges et al. in view of Bartle Sr. of claim 31 has been withdrawn due to applicant's amendment in response 9/20/2004.
5. The 35 U.S.C. 103(a) rejection over Bridges et al. of claims 35,39 has been withdrawn due to applicant's amendment in response 9/20/2004.

New Rejections

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 44,46,47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bridges et al. (5252408).

Bridges et al. discloses a vacuum insulated article comprising a core box of porous material (col. 10 lines 25-30 and figure 2 number 22) having parallel spaced side walls (figure 1 number 16) and a bottom wall (figure 1 number 14) defining an open end chamber (figure 4 the circled area), a bag of flexible gas impermeable film (col. 8 line 42), and having a closed end portion (figure 4 number 30) and a length generally twice the length of the side walls of the box (col. 9 lines 40-41 states that the core is rectangular and is consistent with the panel shape therefore the panel shape is rectangular) an evacuation tube connected to the bag (figure 2 number 18), the core box positioned within the bag (figure 2 number 22) the bag sealed to form an air-tight enclosure around the core box (col. 8 lines 45-48), the bag and the core box adapted to be evacuated with a tubular nozzle projecting into the evacuation tube and connected to a vacuum pump (col. 5 lines 9-10).

As for sucking a portion of the bag into the open end chamber to form a liner for the chamber, the evacuation tube being sealed after the core box and the bag are evacuated to a predetermined vacuum level is an intended use. It has been held that a recitation with respect to the manner in which the claimed particle is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987)

Bridges et al. discloses a vacuum insulated article comprising a core box of porous material (col. 10 lines 25-30 and figure 2 number 22) having parallel spaced side walls (figure 1 number 16) and a bottom wall (figure 1 number 14) defining an open end chamber (figure 4 the circled area), a partially sealed bag of flexible gas impermeable

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film (col. 8 line 42), and having a length generally twice the length of the side walls of the box (col. 9 lines 40-41 states that the core is rectangular and is consistent with the panel shape therefore the panel is rectangular) an evacuation tube connected to the bag (figure 2 number 18), the core box positioned within the bag (figure 2 number 22) the bag sealed to form an air-tight enclosure around the core box (col. 8 lines 45-48, col. 4 lines 41-43), the bag and the core box being evacuated to a predetermined vacuum level causing the bag to enclose the core box tightly (col. 4 lines 43-50) with a portion of the bag lining the chamber (col. 4 lines 43-50 describes that the core material prevents the collapse of the metal walls to each other thus the core material is the intervening material that supports the metal walls therefore will line the chamber after evacuation of the cavity) and the bag being sealed after the core box and the bag are evacuated (col. 5 lines 37-44). Bridges et al. discloses that the bag has a closed end portion overlying the open-end chamber and having sufficient length to the line the chamber (col. 5 lines 37-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akkala in view of in view of De Vos et al. (5843353).

Akkala discloses a vacuum insulated article comprising a gas impermeable flexible film (col. 4 lines 20-27) forming spaced film walls sealed together to form a bag (figure 1 number 14,24), the film walls having projecting portions sealed together to form an integral evacuation tube (figure 1 number 12), a core within the bag (figure 5 number 10), the bag forming an air-tight enclosure around the core (col. 4 lines 37-40), the bag and the core adapted to be evacuated with a tubular nozzle projecting into the evacuation tube (col. 4 lines 40-43) and connected to a vacuum pump (col. 4 lines 40-43), the evacuation tube being sealed after the core and the bag are evacuated to a predetermined vacuum level (col. 4 lines 45-46).

Akkala fail to disclose a porous core material with a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width. De Vos et al. teaches a porous core material with a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width (figure 3a) for the purpose of obtaining the desired ultimate construction after evacuation (col. 7 line 65).

Akkala teaches that the core material can be any of a wide variety of products that are to be protected from oxygen, moisture or dust such as bedding material, therefore, it would have been obvious to provide Akkala with a porous core material since bedding material is notoriously well known to be porous such as pillows and foam paddings.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width in order to obtain the desired ultimate construction after evacuation (col. 7 line 65) as taught by De Vos et al.

8. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akkala in view of Bartle Sr. (4745730).

Akkala discloses the vacuum insulated article described above. Bridges et al. fail to disclose a resilient O-ring adapted to surround and contact the tubular nozzle, the O-ring having an outer peripheral surface engaging a surrounding portion of an outer peripheral surface engaging a surrounding portion of the evacuation tube to form a fluid tight releasable coupling. Bartle Sr. teaches a resilient O-ring to surround and contact the tubular nozzle, the O-ring having an outer peripheral surface engaging a surrounding portion of the evacuation tube for the purpose of providing an improved sealing means (col. 3 line 59-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide a resilient O-ring to surround and contract the tubular nozzle in order to provide an improved sealing means (col. 3 line 59-60) as taught by Bartle Sr.

9. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akkala in view of Bridges et al. (5252408).

Akkala discloses the vacuum insulated article described above. Akkala fail to disclose a thin layer of foam material bonded to the film forming the bag, the layer having a substantially uniform thickness around the bag to form a protective outer surface for the article. Bridges et al. teaches a thin layer of foam material bonded to the film forming the bag, the layer having a substantially uniform thickness around the bag to form a protective outer surface for the article (figure 3 number 40) for the purpose of providing significantly greater resistance to the transmission of heat than the simple sum of the resistance of such a vacuum insulated panel alone (col. 12 lines 40-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Akkala with a thin layer of foam material bonded to the film forming the bag, the layer having a substantially uniform thickness around the bag to form a protective outer surface for the article in order to provide a significantly greater resistance to the transmission of heat than the simple sum of the resistance of such a vacuum insulated panel alone (col. 12 lines 40-42) as taught by Bridges.

10. Claim 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al. in view of De Vos et al. (5843353).

Bridges et al. teaches the vacuum insulated article described above. Bridges et al. fail to disclose a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width. De Vos et al. teaches a plurality of evacuation grooves within an outer surface of the core of porous

material and each groove having a depth greater than its width (figure 3a) for the purpose of obtaining the desired ultimate construction after evacuation (col. 7 line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Bridges with a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width in order to obtain the desired ultimate construction after evacuation (col. 7 line 65) as taught by De Vos et al.

Response to Arguments

11. Applicant's arguments filed 8/19/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the sheet metal panel 14 of Bridges does not line the cavity, Bridges et al. does disclose that the panel does line the cavity. Foam 22 and sheet metal number 14 form the cavity shown in figure 5. Since a cavity is a hollow space, sheet metal 14 lines the hollow space therefore lines the chamber claimed by the applicant.

In response to applicant's argument that De Vos et al. fail to disclose a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width so that the film does not fill the evacuation groove when a suction is applied, De Vos et al. teaches a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width (figure 3a) for the purpose of obtaining the desired ultimate

construction after evacuation (col. 7 line 65). As to the “so that the film does not fill the evacuation groove when suction is applied”, argument, applicant did not claim that the film does not fill the evacuation groove when suction is applied, applicant claimed, “a plurality of evacuation grooves within an outer surface of the core of porous material and each groove having a depth greater than its width”.

In response to applicant's argument that Bridges et al. does not teach applicant's thin layer of foam material bonded to a gas impermeable film forming a bag and having a substantially uniform thickness around the bag, Bridges et al. teaches a thin layer of foam material (col. 12 line 40) bonded to the film forming the bag, the layer having a substantially uniform thickness around the bag to form a protective outer surface for the article (figure 3 number 40) for the purpose of providing significantly greater resistance to the transmission of heat than the simple sum of the resistance of such a vacuum insulated panel alone (col. 12 lines 40-42).

In response to applicant's argument that Bartel Sr. fail to disclose that the O-ring is adapted to surround and contact the tubular nozzle and has an outer peripheral surface engaging a surround portion of the evacuation tube to form a fluid tight releasable coupling, applicant in claim 43 uses the term “adapted” wherein the O-ring is “adapted” to surround and contact the tubular nozzle and has an outer peripheral surface engaging a surround portion of the evacuation tube to form a fluid tight releasable coupling, which does not claim the O-ring to surround and contact the tubular nozzle but that the O-ring is capable of surrounding and contacting the tubular nozzle. The O-ring disclosed by Bartel Sr. surrounds a neck portion of the container bag to hold

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the bag onto the nozzle (figure 5 number 56,52), however, O-ring as depicted from figure 4 number 52 surrounds and contacts the tubular nozzle and has an outer peripheral surface engaging to surround a portion of the evacuation tube (figure 5 number 56) to form a fluid tight releasable coupling (figure 5 number 52,56).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jane Rhee
December 6, 2004



HAROLD PYON
SUPERVISORY PATENT EXAMINER
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12/7/04